

a collimating lens for collimating the divergent beam of light emitted from said light emitting means and directing the collimated beam of light onto said recording surface of said optical disc;

a condensing lens for condensing the collimated beam of light from said collimating lens, directed onto said recording surface of said optical disc and then reflected from said recording surface;

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light receiving means for receiving said collimated beam of light condensed by said condensing lens and detecting the centroid of the intensity of the received beam of light, said light receiving means including a receiving surface partitioned into a plurality of areas for receiving said collimated beam of light condensed by said condensing lens,

wherein said collimating lens and condensing lens constitute a single transmitting and receiving lens, and

wherein said light emitting means and light receiving means are arranged symmetrically on the basis of an optical axis of said transmitting and receiving lens.
